REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Status of Claims:

Claims 8, 9, 15, 16 and 20 are currently being cancelled.

Claims 12 and 17-19 are currently being amended.

Claims 21-26 are currently being added.

This amendment and reply amends and cancels claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending and canceling the claims as set forth above, claims 1-7, 10-14, 17-19 and 21-26 are now pending in this application.

Claim Rejections – Prior Art:

In the Office Action, claims 1-16 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP 09-205390 to Ozaki. It is noted that the heading on section 3) of the Office Action states that these claims are rejected over U.S. Patent No. 7,110,468 to Kohno, but this is clearly incorrect, since: a) the body of section 3) of the Office Action clearly refers to features in JP 09-205390, and b) the body of section 3) of the Office Action refers to Ozaki who is the first named inventor of JP 09-205390 (no "Ozaki" appears in the inventor list of the Kohno patent). Accordingly, this rejection will be addressed with respect to JP 09-205390, and not with respect to U.S. Patent No. 7,110,468. It is noted, however, that claims 8, 9, 15 and 16 appear to be rejected over a combination of Ozaki and Kohno, whereby those claims have been canceled, thereby mooting the rejection of those claims . Also, claims 17-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ozaki. These rejections are traversed for at least the reasons given below.

Independent claim 1 recites, among other things, <u>display means for displaying the estimated correlation values between the signals and the plurality of streams</u>. In its rejection of claim 1, the Office Action asserts that the display section 12 as shown in Figure 1 of Ozaki corresponds to the claimed display means. However, this assertion is incorrect. Namely, the display section 12 of Ozaki merely informs that the movement of Ozaki's antenna is finished, such as by a "Antenna Movement Finished" textual indication on a display. This clearly does not disclose or suggest the display of an estimated correlation value between signals of a plurality of antennas.

Thus, Ozaki does not disclose or suggest the claimed display means of claim 1.

Still further, the Office Action asserts that column 0005 of Ozaki discloses antenna correction adjustment means for causing the correlation values between the signals of the plurality of antennas to be altered manually by a user. It appears that the Office Action is relying on a machine translation of Ozaki, which Applicant's representative also obtained from the Japanese Patent Office web site. The machine language translation of paragraph 0005 of Ozaki states that:

> *[0005]*
>
> *[Means for Solving the Problem] The description of this invention prepares the correlation count section which calculates the mutual correlation value of the input signal according to individual by which antenna spacing makes a parameter the antenna migration equipment and antenna spacing which can carry out adjustable, and is received for two or more receiving antennas of every in order to solve the above-mentioned technical problem, and installs it at intervals of the antenna to receive and which becomes the closest to no correlating for every area. Moreover, in the area which asked for spacing once, you make it the car location detection equipment currently mounted interlocked with, and spacing data are memorized in the database with car location data, and again, when receiving in this area, spacing data are obtained from the immediate-data base with the car location data of car location detection equipment.*

It appears that the Office Action relies on the word "individual" to connote that a user decides the amount of antenna spacing, but this is incorrect, based on a review of the entirety of the machine language translation of Ozaki. In more detail paragraph 0009 of Ozaki states that:

> [0009] Next, when spacing data are not stored, it asks for spacing data in the following actuation. **Spacing data are memorized as a parameter for correlation value count in the movable range in spacing by the spacing control section 10. First, according to one spacing data, antenna migration is performed from this spacing control section 10.** Next, reception is started, a correlation value is calculated from the signal level of an intermediate frequency signal in the correlation count section from a received higher harmonic wave and the intermediate frequency sections 5 and 6 (step 102), and this is memorized to the correlation comparator 9. About another spacing data, a correlation value is calculated similarly. The calculated correlation value chooses and memorizes the smaller one as compared with the correlation value memorized last time in the correlation comparator 9 (step 103). This actuation is repeated about all range and performed. Here, antenna spacing to the correlation value finally memorized to the correlation comparator 9 is the optimal spacing in a local region. Therefore, the spacing data to the memorized correlation value are read from the spacing control section 9, and it memorizes in the database 13 with the car location data from car location detection equipment 14 (step 104), and when communicating from next time in this area, this spacing data is referred to. Finally, antennas 1 and 2 are moved according to spacing data (step 105), and the buzzer section 11 and the display display 12 report completion (step 106). (emphasis added).

As is clear from the above passage in Ozaki, and due to the fact that the word "individual" does not appear anywhere else besides that one occurrence in paragraph 0005 of Ozaki, Ozaki does not disclose or suggest that a user can cause the correlation value between the signals of the plural streams to be altered manually, but rather Ozaki's system provides for an automatic spacing change between antennas that does not involve any user input. Machine

language translations are notoriously poor, and in this case the translation to the word "individual" clearly was not meant to refer to a person, but rather to a single thing.

Still further, in the invention according to claim 1, a correlation value between signals of a plurality of streams received at respective plurality of antennas is estimated and displayed to a user so that the correlation value can be manually adjusted by the user. Contrary to this, Ozaki relates to a space diversity antenna installation system in which a correlation value between antenna reception signals is calculated. Ozaki fails to disclose or suggest that a correlation value is displayed to a user to enable manual adjustment of the correlation value by the user in an adaptive array radio communication apparatus.

Thus, Ozaki does not disclose or suggest the claimed antenna correlation adjustment means of claim 1, whereby Kohno (not cited against claim 1) does not rectify these deficiencies of Ozaki.

Accordingly, Ozaki cannot anticipate claim 1, since it does not disclose or suggest several elements of that claim, as discussed in detail above. Presently pending independent claims 12 and 17 recite similar features to those discussed above with respect to claim 1, and thus those claims are also not disclosed or suggested by Ozaki.

With respect to the rejection of dependent claim 2, paragraph 0005 of Ozaki, as provided above in a machine language translation, says nothing about what is displayed by its display means.

With respect to the rejection of dependent claim 3 based on paragraph 0007 of Ozaki, a machine language translation of that paragraph of Ozaki states that:

> *[0007]*
> *[Embodiment of the Invention] One example of this invention is explained using* *drawing 1* *and* *drawing 2* *. This example is the case where two receiving antennas are used. First, a configuration block Fig. is shown in* *drawing 1* *. The correlation count section 8 which calculates a correlation value from the input signal from each antenna (each branch), the correlation comparator 9 which compares the calculated correlation value and chooses so-called min, the spacing control section 10 which controls migration of an antenna by making antenna spacing into a parameter, the*

buzzer section 11 which reports that antenna migration was completed, and the display display 12 are formed in the walkie-talkie terminal 3. Antenna migration equipment 4 is connected to receiving antennas 1 and 2, and it moves to them according to the spacing control section 10. In antenna migration equipment 4, as shown in the image Fig. shown in <u>drawing 3</u> , it is carried on the roof of the mobile radio vehicle 15. The database 13 which stores the car location detection equipment 14, and its data and spacing data for obtaining car location data is formed in the wireless section outside the plane.

As is clear from reading the above passage, paragraph 0007 of Ozaki says nothing about the specific features recited in dependent claim 3.

With respect to the rejection of dependent claim 4, which recites that the display means can display the correlation value and the magnitude level of the correlation, the display section 12 of Ozaki merely provides an indication to a user that the antenna movement is complete, which is clearly not at all relevant to the specific features recited in claim 4.

With respect to the rejection of dependent claim 5, which recites display content switch means for sequentially switching the display content by the display means periodically, the display section 12 of Ozaki merely provides an indication to a user that the antenna movement is complete, which is clearly not at all relevant to the specific features recited in claim 4. For example, no periodic switching is discussed at all in the Abstract of Ozaki.

Accordingly, dependent claims 2-5 are patentable for the reasons given above, beyond the reasons given previously for their base claim 1.

With respect to the rejection of independent claim 12 (beyond the comments provided abovec), that claim recites, among other things:

<u>receiving a user input for causing the estimated correlation value to be altered by a user; and readjusting the plurality of antennas based on the user-altered correlation value.</u> As is clear with respect to the rejection of claim 1, Ozaki's system does not receive a user input

for causing an estimated correlation value to be altered by a user, and Ozaki's system does not readjust a plurality of antennas based on the user-altered correlation value.

Accordingly, independent claim 12, as well as independent claim 17 that recites similar features, are not disclosed or suggested by Ozaki (whereby Kohno, which is not cited against claims 12 and 17, does not rectify these deficiencies of Ozaki).

Similarly, as discussed above with respect to dependent claims 2, 3, dependent claims 13, 14, 18 and 19 respectively recite similar features, respectively, and thus Ozaki does not disclose or suggest such features in claims 13, 14, 18 and 19, as discussed above with respect to claims 2 and 3.

With respect to independent claims 8, 15 and 20, those claims are directed to an estimated correlation value that is automatically adjusted such that the estimated correlation value becomes smaller. With respect to the rejection of claims 8, 15 and 20, the Office Action relies in part on Kohno. However, Kohno mainly relates to a transmission apparatus, whereby Kohno fails to disclose or suggest an antenna correlation adjustment means that reduces a correlation value of received signals in a radio communication apparatus which performs adaptive array reception with a plurality of antenna.

Accordingly, since Ozaki does not rectify these shortcomings of Kohno, independent claims 8, 15 and 20 are patentable over the combined teachings of those two references.

New Claims:

New claims 21-26 have been added to recite features of the display means (step) that are shown best in Figures 2B and 2C of the drawings, whereby such features are not taught or suggested by either Ozaki or by Kohno.

Conclusion:

Since all of the issues raised in the Office Action have been addressed in this Amendment and Reply, Applicant believes that the present application is now in condition for allowance, and an early indication of allowance is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment,

-12-

to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date _July 17, 2007_

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 672-5485
Facsimile: (202) 672-5399

By _Phillip J. Articola_

William T. Ellis
Registration No. 26,874

Phillip J. Articola
Registration No. 38,819

-13-